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(1) Applicant: Pacesetter AB Röntgenvägen 2 S-171 95 Solna (SE) 72 Inventor: Sholder, Jason A. 216 South Stanley Drive Beverly Hills, CA 92011 (US)

(74) Representative: Rees, David Christopher t al. Kilburn & Strode
30 John Street
London WC1N 2DD (GB)

(54) Implantable pacemaker having AV interval for providing ventricular pacing.

A dual-chamber implantable pacemaker configured to operate in the DDD or DDDR mode automatically adjusts its AV (or PV) interval to an amount just less than the natural conduction time of a patient, thereby assuring that ventricular pacing occurs in a patient's cardiac cycle at a time near when a natural ventricular contraction (an R-wave) would occur. The pacemaker includes a pulse generator that generates ventricular stimulation pulses (V-pulses) at the condusion of a pacemaker-defined AV (or PV) interval if no natural ventricular activity (an R-wave) is sensed during such AV (or PV) interval. The AV (or PV) intervals are automatically adjusted by the pacemaker to be just less than the natural conduction time sensed by the pacemaker, where the natural conduction time is the time between atrial activity (a sensed P-wave or a delivered A-pulse) and the subsequent natural ventricular activity (R-wave). The system and method are particularly adapted for use by patients suffering from a cardiomyopathy in order to improve cardiac out-



EUROPEAN SEARCH REPORT

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	DOCUMENTS CONSIDE Citation of document with indica	kion, where appropriate,	Relevant	CLASSIFICATION OF THE APPLICATION (Int.CL5)	
X A	ef relevant passage EP-A-0 056 745 (MEDTRI * abstract; claims 1,	ONIC)	1,6,15 2,7,9, 11,12, 16,19, 24,26, 27,34		
A			18,23, 30,33		
A	EP-A-0 443 495 (SIEME	NS)	1,6,15 18,23, 30,33		
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A	EP-A-0 450 387 (SIEME	ENS)	1,6,15 18,23, 30,33		
	* abstract *				
A	US-A-5 123 412 (BETZO * abstract *	OLD)	23	TECHNICAL FIELDS SEARCHED (Int.Cl.5)	
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	The present search report has b	een drawn up for all claims			
(80)	Place of search	Date of completion of th	e search	Position	
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최 Y	CATEGORY OF CITED DOCUME: : particularly relevant if taken alone : particularly relevant if combined with an document of the same category : technological background	E : earlie after D : docu L : docu	r patent document, the filling date ment cited in the ap- ment cited for other	or principle underlying the invention patent document, but published on, or e filing date ant cited in the application ant cited for other reasons or of the same patent family, corresponding	